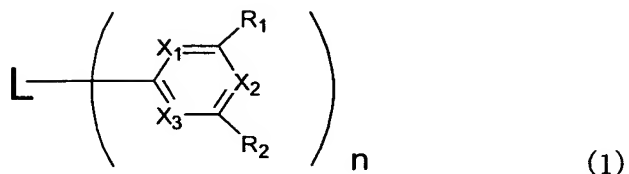


# CLAIMS

1. A material for an organic electroluminescence device comprising a compound represented by the following general formula (1):



where:

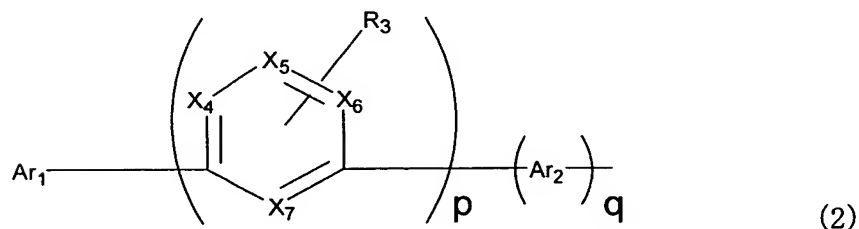
L represents a linking group having at least one meta bond;

R<sub>1</sub> and R<sub>2</sub> each independently represent a hydrogen atom, an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an alkoxy group which has 1 to 50 carbon atoms and which may have a substituent, an aryloxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkyl group which has 7 to 50 ring carbon atoms and which may have a substituent, an alkenyl group which has 2 to 50 carbon atoms and which may have a substituent, an alkylamino group which has 1 to 50 carbon atoms and which may have a substituent, an arylamino group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkylamino group which has 7 to 50 ring carbon atoms and which may have a substituent, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, or a

cyano group;

$X_1$  to  $X_3$  each independently represent  $=CR-$  or  $=N-$ , at least one of  $X_1$  to  $X_3$  representing  $=N-$  where R represents an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, an alkoxy group which has 1 to 50 carbon atoms and which may have a substituent, an aralkyl group which has 7 to 50 ring carbon atoms and which may have a substituent, an aryloxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an arylthio group which has 5 to 50 ring carbon atoms and which may have a substituent, a carboxyl group, a halogen atom, a cyano group, a nitro group, or a hydroxyl group; and n represents an integer of 1 to 5.

2. A material for an organic electroluminescence device according to claim 1, wherein L in the general formula (1) is represented by the following general formula (2):



where:

X<sub>4</sub> to X<sub>7</sub> each independently represent =CR- or =N- where R represents any one of the same groups as those described above;

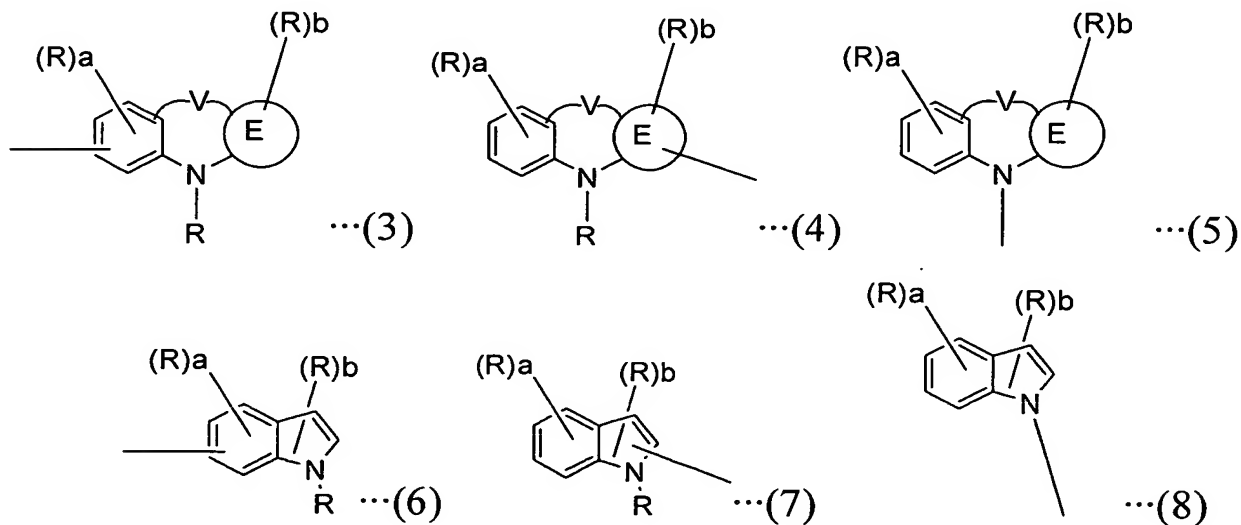
R<sub>3</sub> represents a hydrogen atom, an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an alkoxy group which has 1 to 50 carbon atoms and which may have a substituent, an aryloxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkyl group which has 7 to 50 ring carbon atoms and which may have a substituent, an alkenyl group which has 2 to 50 carbon atoms and which may have a substituent, an alkylamino group which has 1 to 50 carbon atoms and which may have a substituent, an arylamino group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkylamino group which has 7 to 50 ring carbon atoms and which may have a substituent, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, or a cyano group, and two or more R<sub>3</sub>s may be included;

Ar<sub>1</sub> represents a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an aryloxy group or aryleneoxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an arylamino group or aryleneamino group which has 5 to 50 ring carbon atoms and which may have a substituent, or an aryl group or arylene group which has 6 to 50 ring carbon atoms and which may have a substituent;

Ar<sub>2</sub> represents a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an aryleneoxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aryleneamino group which has 5 to 50 ring carbon atoms and which may have a substituent, or an arylene group which has 6 to 50 ring carbon atoms and which may have a substituent; and

p represents an integer of 1 to 20 and q represents an integer of 1 to 20.

3. A material for an organic electroluminescence device according to claim 2, wherein Ar<sub>1</sub> has a substituent represented by any one of the following general formulae (3) to (8):



where:

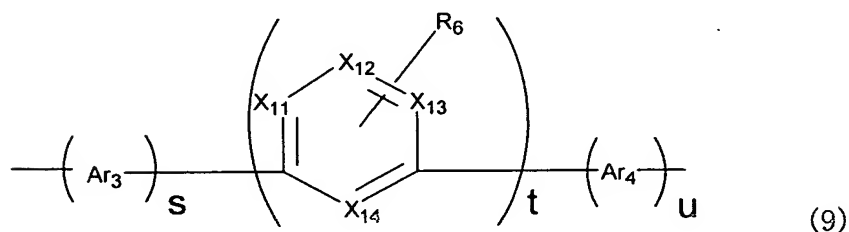
R represents any one of the same groups as those described above, and when two or more Rs are included, Rs may bond to each

other to form a ring structure, and a and b each represent an integer of 0 to 4;

V represents a single bond,  $-\text{CR}_0\text{R}_0'-$ ,  $-\text{SiR}_0\text{R}_0'-$ ,  $-\text{O}-$ ,  $-\text{CO}-$ , or  $-\text{NR}_0$  where  $\text{R}_0$  and  $\text{R}_0'$  each independently represent a hydrogen atom, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, or an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, and

E represents a cyclic structure represented by a circle surrounding a symbol E, and represents a cycloalkane residue which has 3 to 20 ring carbon atoms and which may have a substituent, and a carbon atom of which may be substituted by a nitrogen atom, an aromatic hydrocarbon residue which has 4 to 50 ring carbon atoms and which may have a substituent, or a heterocyclic residue which has 4 to 50 ring atoms and which may have a substituent;

4. A material for an organic electroluminescence device according to claim 1, wherein L in the general formula (1) is represented by the following general formula (9):



where:

$X_{11}$  to  $X_{14}$  each independently represent  $=CR-$  or  $=N-$  where R represents any one of the same groups as those described above;

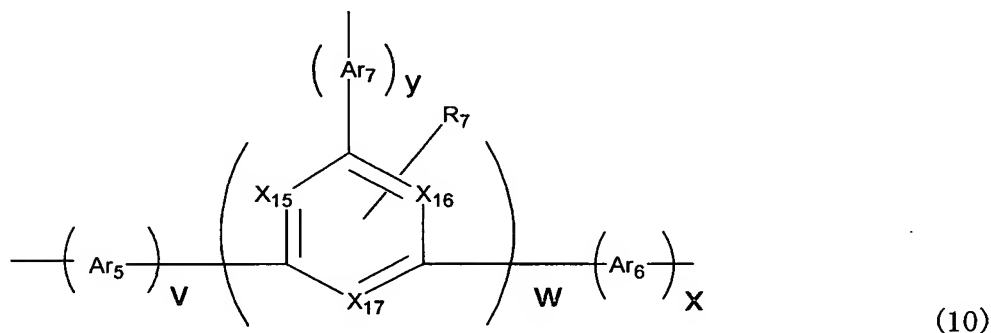
$R_6$  represents a hydrogen atom, an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an alkoxy group which has 1 to 50 carbon atoms and which may have a substituent, an aryloxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkyl group which has 7 to 50 ring carbon atoms and which may have a substituent, an alkenyl group which has 2 to 50 carbon atoms and which may have a substituent, an alkylamino group which has 1 to 50 carbon atoms and which may have a substituent, an arylamino group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkylamino group which has 7 to 50 ring carbon atoms and which may have a substituent, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, or a cyano group, and two or more  $R_6$ s may be included;

$Ar_3$  and  $Ar_4$  each independently represent a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an aryleneoxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aryleneamino group which has 5 to 50 ring carbon atoms and which may have a substituent, or an arylene group which has 6 to 50 ring carbon atoms and which may have a substituent;

and

s represents an integer of 0 to 20, t represents an integer of 1 to 20, and u represents an integer of 0 to 20.

5. A material for an organic electroluminescence device according to claim 1, wherein L in the general formula (1) is represented by the following general formula (10):



where:

X<sub>15</sub> to X<sub>17</sub> each independently represent =CR- or =N- where R represents any one of the same groups as those described above;

R<sub>7</sub> represents a hydrogen atom, an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an alkoxy group which has 1 to 50 carbon atoms and which may have a substituent, an aryloxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkyl group which has 7 to 50 ring carbon atoms and which may have a substituent, an alkenyl group which has 2 to 50 carbon atoms and which may have a substituent,

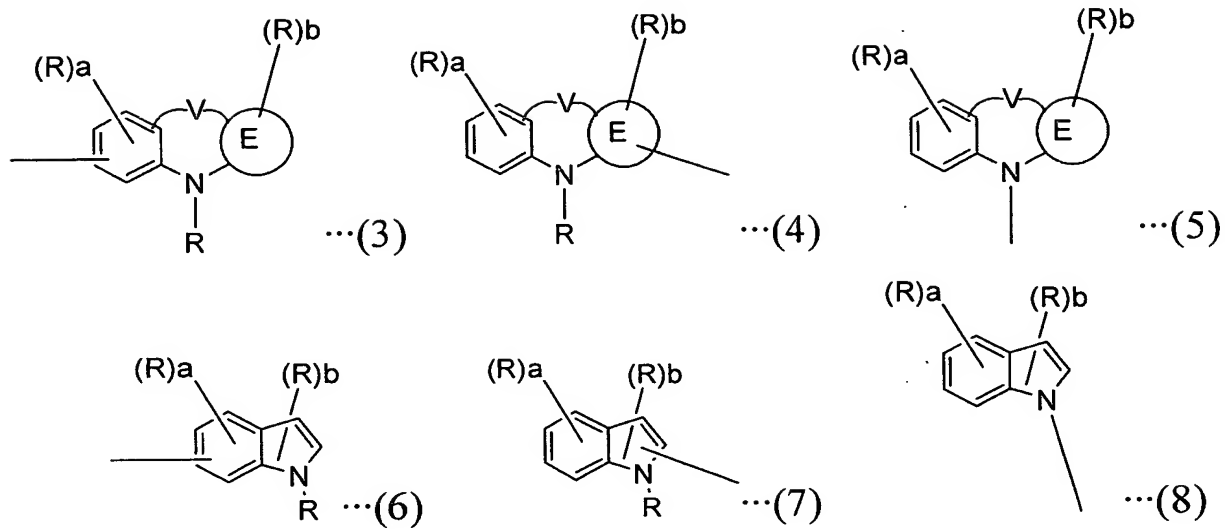
an alkylamino group which has 1 to 50 carbon atoms and which may have a substituent, an arylamino group which has 5 to 50 ring carbon atoms and which may have a substituent, an aralkylamino group which has 7 to 50 ring carbon atoms and which may have a substituent, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, or a cyano group, and two or more R<sub>7</sub>s may be included;

Ar<sub>5</sub> to Ar<sub>7</sub> each independently represent a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, an aryleneoxy group which has 5 to 50 ring carbon atoms and which may have a substituent, an aryleneamino group which has 5 to 50 ring carbon atoms and which may have a substituent, or an arylene group which has 6 to 50 ring carbon atoms and which may have a substituent;

v represents an integer of 0 to 20, w represents an integer of 1 to 20, x represents an integer 0 to 20, and y represents an integer of 0 to 20.

6. A material for an organic electroluminescence device according to claim 4, wherein the material has at least one substituent represented by any one of the following general formulae (3) to (8):





where:

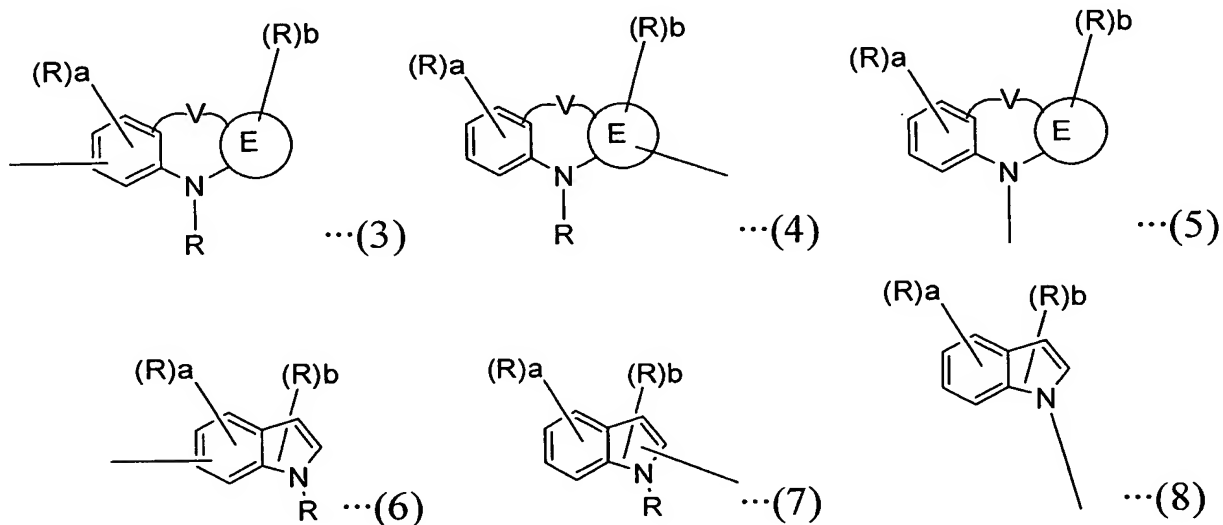
R represents any one of the same groups as those described above, and when two or more Rs are included, Rs may bond to each other to form a ring structure, and a and b each represent an integer of 0 to 4;

V represents a single bond,  $-\text{CR}_0\text{R}_0'-$ ,  $-\text{SiR}_0\text{R}_0'-$ ,  $-\text{O}-$ ,  $-\text{CO}-$ , or  $-\text{NR}_0$  where  $\text{R}_0$  and  $\text{R}_0'$  each independently represent a hydrogen atom, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, or an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, and

E represents a cyclic structure represented by a circle surrounding a symbol E, and represents a cycloalkane residue which has 3 to 20 ring carbon atoms and which may have a substituent, and a carbon atom of which may be substituted by a nitrogen atom,

an aromatic hydrocarbon residue which has 4 to 50 ring carbon atoms and which may have a substituent, or a heterocyclic residue which has 4 to 50 ring atoms and which may have a substituent;

7. A material for an organic electroluminescence device according to claim 5, wherein the material has at least one substituent represented by any one of the following general formulae (3) to (8):



where:

R represents any one of the same groups as those described above, and when two or more Rs are included, Rs may bond to each other to form a ring structure, and a and b each represent an integer of 0 to 4;

V represents a single bond,  $-CR_0R_0'-$ ,  $-SiR_0R_0'-$ ,  $-O-$ ,  $-CO-$ , or  $-NR_0$  where  $R_0$  and  $R_0'$  each independently represent a hydrogen

atom, an aryl group which has 6 to 50 ring carbon atoms and which may have a substituent, a heterocyclic group which has 5 to 50 ring atoms and which may have a substituent, or an alkyl group which has 1 to 50 carbon atoms and which may have a substituent, and

E represents a cyclic structure represented by a circle surrounding a symbol E, and represents a cycloalkane residue which has 3 to 20 ring carbon atoms and which may have a substituent, and a carbon atom of which may be substituted by a nitrogen atom, an aromatic hydrocarbon residue which has 4 to 50 ring carbon atoms and which may have a substituent, or a heterocyclic residue which has 4 to 50 ring atoms and which may have a substituent;

8. A material for an organic electroluminescence device according to any one of claims 1 to 7, wherein the material comprises a host material in a light emitting layer of an organic electroluminescence device.

9. An organic electroluminescence device comprising an organic thin film layer composed of one or more layers including at least a light emitting layer, the organic thin film layer being interposed between a cathode and an anode, wherein at least one layer of the organic thin film layer contains the material for an organic electroluminescence device according to any one of claims 1 to 7.

10. An organic electroluminescence device according to claim 9, wherein the light emitting layer contains a host material and a phosphorescent material, and the host material contains the material for an organic electroluminescence device according to any one of claims 1 to 7.

11. An organic electroluminescence device according to claim 9, wherein a reducing dopant is added to an interfacial region between the cathode and the organic thin film layer.